

Hydric Soils: Hydric soils are defined in the manual as "soils that are saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions in the upper part." Field indicators include color, mottling, gleying, and sulfidic odor.

Wetland Hydrology: The wetland hydrology criterion is often the most difficult to determine. Typically, the presence of water for a week or more during the growing season creates anaerobic conditions. Anaerobic conditions lead to the prevalence of wetland plants. Morphological adaptations of plants, driftlines and watermarks are examples of wetland hydrology field indicators.

RESULTS AND DISCUSSION

STUDY AREA

The study area is located within the Spartan Meadows Golf Course between Randall Road and Elgin Community College. CBBEL identified five wetlands and five waters of the U.S. within the study area (Exhibit 7). In our opinion, the identified wetlands and waters of the U.S. will be regulated under Section 404 of the Clean Water Act because they are either directly contiguous with or located within the 100-year floodplain of Otter Creek. Regardless of federal jurisdictional status, the identified wetlands and waters of the U.S. are regulated under the Kane County Stormwater Ordinance and Technical Manual (Ordinance; revised October 9, 2001; effective January 1, 2002). The following table briefly summarizes the delineated areas.

DELINEATED AREA	DATA POINT	TYPE	SIZE ¹ (on-site)	FQI ²	COE BUFFER WIDTH ³	KANE COUNTY BUFFER WIDTH ⁴
Waters of the U.S. 1	1A	Otter Creek	±1.0 acre	N/A	50 feet	To Be Determined
Waters of the U.S. 2	3A	Open water pond	±0.5 acre	N/A	30 feet	To Be Determined
Waters of the U.S. 3	8A	Open water pond	±1.1 acres	N/A	50 feet	To Be Determined
Waters of the U.S. 4	6A	Open water pond	±0.4 acre	N/A	30 feet	To Be Determined
Waters of the U.S. 5	10A	Open water detention pond with wetland fringe	±1.5 acre	14.1 (wetland fringe)	50 feet	To Be Determined
Wetland 1	2A	Wetland swale	±0.1 acre	11.2	Not required	Not required
Wetland 2	4A	Wetland fringe	±0.4 acre	8.7	30 feet	15 feet
Wetland 3	7A	Wetland fringe	±0.2 acre	6.5	Not required	Not required
Wetland 4	5A	Wetland fringe	±0.1 acre	4.9	Not required	Not required
Wetland 5	9A	Scrub/shrub	±0.2 acre	5.7	To Be Determined	50 feet

Attachment: Background 1
FROM: WBK-CORPS 8-25-10



SCALE: 1" = 600'

0 LYTHRUM SALICARIA	-5 OBL	Ad P-Forb	PURPLE LOOSESTRIPE
5 Penthorum sedoides	-5 OBL	Nt P-Forb	DITCH STONECROP
0 PHALARIS ARUNDINACEA	-4 FACW+	Ad P-Grass	REED CANARY GRASS
2 Populus deltoides	-1 FAC+	Nt Tree	EASTERN COTTONWOOD
0 RUMEX CRISPUS	-1 FAC+	Ad P-Forb	CURLY DOCK
4 Sagittaria latifolia	-5 OBL	Nt P-Forb	COMMON ARROWHEAD
1 Salix interior	-5 OBL	Nt Shrub	SANDBAR WILLOW
4 Salix nigra	-5 OBL	Nt Tree	BLACK WILLOW
0 SOLANUM DULCAMARA	0 FAC	Ad W-Vine	BITTERSWEET NIGHTSHADE
1 Typha latifolia	-5 OBL	Nt P-Forb	BROAD-LEAVED CATTAIL

Wetland 2

Wetland 2, characterized at data point 4A, is a wetland fringe located adjacent to Otter Creek (Exhibit 8). The ±0.4 acre wetland is dominated by reed canary grass, narrow-leaved cattail, lake sedge (*Carex lacustris*), red-rooted spike rush (*Eleocharis erythropoda*) and stinging nettle (*Urtica dioica*). Positive wetland hydrology was indicated by saturated soils and areas of inundation. Soils were mapped and field verified as Houghton muck, a very poorly drained hydric soil.

The following lists identified plants with the calculated native mean C-value:

FLORISTIC QUALITY DATA							
12 NATIVE SPECIES	Native	12	63.2%	Adventive	7	36.8%	
19 Total Species	Tree	1	5.3%	Tree	0	0.0%	
2.5 NATIVE MEAN C	Shrub	1	5.3%	Shrub	1	5.3%	
1.6 W/Adventives	W-Vine	0	0.0%	W-Vine	0	0.0%	
8.7 NATIVE FQI	H-Vine	0	0.0%	H-Vine	0	0.0%	
6.9 W/Adventives	P-Forb	6	31.6%	P-Forb	3	15.8%	
-3.6 NATIVE MEAN W	B-Forb	0	0.0%	B-Forb	0	0.0%	
-2.7 W/Adventives	A-Forb	1	5.3%	A-Forb	0	0.0%	
AVG: Fac. Wetland (+)	P-Grass	0	0.0%	P-Grass	3	15.8%	
	A-Grass	0	0.0%	A-Grass	0	0.0%	
	P-Sedge	3	15.8%	P-Sedge	0	0.0%	
	A-Sedge	0	0.0%	A-Sedge	0	0.0%	
	Cryptogam	0	0.0%				

C SCIENTIFIC NAME	W WETNESS	PHYSIOGNOMY	COMMON NAME
0 Acer negundo	-2 FACW-	Nt Tree	BOX ELDER
4 Alisma subcordatum	-5 OBL	Nt P-Forb	COMMON WATER PLANTAIN
6 Carex lacustris	-5 OBL	Nt P-Sedge	COMMON LAKE SEDGE
2 Carex vulpinoidea	-5 OBL	Nt P-Sedge	BROWN FOX SEDGE
2 Eleocharis erythropoda	-5 OBL	Nt P-Sedge	RED-ROOTED SPIKE RUSH
0 HORDEUM JUBATUM	-1 FAC+	Ad P-Grass	SQUIRREL-TAIL GRASS
4 Juncus dudleyi	0 [FAC]	Nt P-Forb	DUDLEY'S RUSH
5 Lycopodium americanus	-5 OBL	Nt P-Forb	COMMON WATER HOREHOUND
0 LYTHRUM SALICARIA	-5 OBL	Ad P-Forb	PURPLE LOOSESTRIPE
0 PHALARIS ARUNDINACEA	-4 FACW+	Ad P-Grass	REED CANARY GRASS
0 POA PRATENSIS	1 FAC-	Ad P-Grass	KENTUCKY BLUE GRASS
0 Polygonum pensylvanicum	-4 FACW+	Nt A-Forb	PINKWEED
0 ROSA MULTIFLORA	3 FACU	Ad Shrub	MULTIFLORA ROSE
0 RUMEX CRISPUS	-1 FAC+	Ad P-Forb	CURLY DOCK
4 Sagittaria latifolia	-5 OBL	Nt P-Forb	COMMON ARROWHEAD
1 Salix interior	-5 OBL	Nt Shrub	SANDBAR WILLOW
1 Solidago altissima	3 FACU	Nt P-Forb	TALL GOLDENROD
1 Typha angustifolia	-5 OBL	Nt P-Forb	NARROW-LEAVED CATTAIL
0 URTICA DIOICA	-1 FAC+	Ad P-Forb	STINGING NETTLE

Wetland 3

Wetland 3, characterized at data point 7A, is a wetland fringe of a pond (Exhibit 7). This ±0.2 acre wetland is dominated by reed canary grass, common arrowhead and red-rooted spike rush. Positive wetland hydrology was indicated by inundation near the center of the wetland and saturated soils around the perimeter. Soils were mapped and field verified as Houghton muck, a very poorly drained hydric soil.

The following lists identified plants with the calculated native mean C-value:

FLORISTIC QUALITY DATA	Native	6	75.0%	Adventive	2	25.0%
6 NATIVE SPECIES	Tree	0	0.0%	Tree	0	0.0%
8 Total Species	Shrub	0	0.0%	Shrub	0	0.0%
2.7 NATIVE MEAN C	W-Vine	0	0.0%	W-Vine	0	0.0%
2.0 W/Adventives	H-Vine	0	0.0%	H-Vine	0	0.0%
6.5 NATIVE FQI	P-Forb	5	62.5%	P-Forb	0	0.0%
5.7 W/Adventives	B-Forb	0	0.0%	B-Forb	0	0.0%
-2.8 NATIVE MEAN W	A-Forb	0	0.0%	A-Forb	0	0.0%
-2.5 W/Adventives	P-Grass	0	0.0%	P-Grass	2	25.0%
AVG: Fac. Wetland	A-Grass	0	0.0%	A-Grass	0	0.0%
	P-Sedge	1	12.5%	P-Sedge	0	0.0%
	A-Sedge	0	0.0%	A-Sedge	0	0.0%
	Cryptogam	0	0.0%			

C SCIENTIFIC NAME	W WETNESS	PHYSIOGNOMY	COMMON NAME
4 <i>Alisma subcordatum</i>	-5 OBL	Nt P-Forb	COMMON WATER PLANTAIN
2 <i>Eleocharis erythropoda</i>	-5 OBL	Nt P-Sedge	RED-ROOTED SPIKE RUSH
4 <i>Juncus dudleyi</i>	0 [FAC]	Nt P-Forb	DUDLEY'S RUSH
0 <i>PHALARIS ARUNDINACEA</i>	-4 FACW+	Ad P-Grass	REED CANARY GRASS
0 <i>POA PRATENSIS</i>	1 FAC-	Ad P-Grass	KENTUCKY BLUE GRASS
4 <i>Sagittaria latifolia</i>	-5 OBL	Nt P-Forb	COMMON ARROWHEAD
1 <i>Solidago altissima</i>	3 FACU	Nt P-Forb	TALL GOLDENROD
1 <i>Typha angustifolia</i>	-5 OBL	Nt P-Forb	NARROW-LEAVED CATTAIL

Wetland 4

Wetland 4, characterized at data point 5A, is a wetland fringe located adjacent to an unnamed tributary of Otter Creek (Exhibit 7). This ±0.1 acre wetland is dominated by reed canary grass, common arrowhead, narrow-leaved cattail, common water plantain (*Alisma subcordatum*) and knee grass (*Panicum dichotomiflorum*). Positive wetland hydrology was indicated by the presence of surface water. Soils were mapped and field verified as Houghton muck, a very poorly drained hydric soil.

The following lists identified plants with the calculated native mean C-value:

LORISTIC QUALITY DATA	Native	6	75.0%	Adventive	2	25.0%
6 NATIVE SPECIES	Tree	0	0.0%	Tree	0	0.0%
8 Total Species	Shrub	0	0.0%	Shrub	0	0.0%
2.0 NATIVE MEAN C	W-Vine	0	0.0%	W-Vine	0	0.0%
1.5 W/Adventives	H-Vine	0	0.0%	H-Vine	0	0.0%
4.9 NATIVE FQI	P-Forb	4	50.0%	P-Forb	0	0.0%
4.2 W/Adventives	B-Forb	0	0.0%	B-Forb	0	0.0%
-4.5 NATIVE MEAN W	A-Forb	0	0.0%	A-Forb	0	0.0%
-3.7 W/Adventives	P-Grass	0	0.0%	P-Grass	2	25.0%
AVG: Fac. Wetland (+)	A-Grass	1	12.5%	A-Grass	0	0.0%
	P-Sedge	1	12.5%	P-Sedge	0	0.0%
	A-Sedge	0	0.0%	A-Sedge	0	0.0%
	Cryptogam	0	0.0%			

C SCIENTIFIC NAME	W WETNESS	PHYSIOGNOMY	COMMON NAME
4 <i>Alisma subcordatum</i>	-5 OBL	Nt P-Forb	COMMON WATER PLANTAIN
2 <i>Eleocharis erythropoda</i>	-5 OBL	Nt P-Sedge	RED-ROOTED SPIKE RUSH
0 <i>Panicum dichotomiflorum</i>	-2 FACW-	Nt A-Grass	KNEE GRASS
0 <i>PHALARIS ARUNDINACEA</i>	-4 FACW+	Ad P-Grass	REED CANARY GRASS
0 <i>POA PRATENSIS</i>	1 FAC-	Ad P-Grass	KENTUCKY BLUE GRASS
4 <i>Sagittaria latifolia</i>	-5 OBL	Nt P-Forb	COMMON ARROWHEAD
1 <i>Typha angustifolia</i>	-5 OBL	Nt P-Forb	NARROW-LEAVED CATTAIL
1 <i>Typha latifolia</i>	-5 OBL	Nt P-Forb	BROAD-LEAVED CATTAIL

Wetland 5

Wetland 5, characterized at data point 9A, is located northeast of Otter Creek and extends off-site (Exhibit 7). This wetland is dominated by reed canary grass, stinging nettle and tall goldenrod (*Solidago altissima*). Positive wetland hydrology was indicated

The following lists identified plants with the calculated native mean C-value:

FLORISTIC QUALITY DATA			Native	6	75.0%	Adventive	2	25.0%
6 NATIVE SPECIES			Tree	0	0.0%	Tree	0	0.0%
8 Total Species			Shrub	0	0.0%	Shrub	0	0.0%
2.7 NATIVE MEAN C			W-Vine	0	0.0%	W-Vine	0	0.0%
2.0 W/Adventives			H-Vine	0	0.0%	H-Vine	0	0.0%
6.5 NATIVE FQI			P-Forb	5	62.5%	P-Forb	0	0.0%
5.7 W/Adventives			B-Forb	0	0.0%	B-Forb	0	0.0%
-2.8 NATIVE MEAN W			A-Forb	0	0.0%	A-Forb	0	0.0%
-2.5 W/Adventives			P-Grass	0	0.0%	P-Grass	2	25.0%
AVG: Fac. Wetland			A-Grass	0	0.0%	A-Grass	0	0.0%
			P-Sedge	1	12.5%	P-Sedge	0	0.0%
			A-Sedge	0	0.0%	A-Sedge	0	0.0%
			Cryptogam	0	0.0%			

C SCIENTIFIC NAME	W WETNESS	PHYSIOGNOMY	COMMON NAME
4 Alisma subcordatum	-5 OBL	Nt P-Forb	COMMON WATER PLANTAIN
2 Eleocharis erythropoda	-5 OBL	Nt P-Sedge	RED-ROOTED SPIKE RUSH
4 Juncus dudleyi	0 [FAC]	Nt P-Forb	DUDLEY'S RUSH
0 PHALARIS ARUNDINACEA	-4 FACW+	Ad P-Grass	REED CANARY GRASS
0 POA PRATENSIS	1 FAC-	Ad P-Grass	KENTUCKY BLUE GRASS
4 Sagittaria latifolia	-5 OBL	Nt P-Forb	COMMON ARROWHEAD
1 Solidago altissima	3 FACU	Nt P-Forb	TALL GOLDENROD
1 Typha angustifolia	-5 OBL	Nt P-Forb	NARROW-LEAVED CATTAIL

Wetland 4

Wetland 4, characterized at data point 5A, is a wetland fringe located adjacent to an unnamed tributary of Otter Creek (Exhibit 7). This ±0.1 acre wetland is dominated by reed canary grass, common arrowhead, narrow-leaved cattail, common water plantain (*Alisma subcordatum*) and knee grass (*Panicum dichotomiflorum*). Positive wetland hydrology was indicated by the presence of surface water. Soils were mapped and field verified as Houghton muck, a very poorly drained hydric soil.

The following lists identified plants with the calculated native mean C-value:

LORISTIC QUALITY DATA	Native	6	75.0%	Adventive	2	25.0%
6 NATIVE SPECIES	Tree	0	0.0%	Tree	0	0.0%
8 Total Species	Shrub	0	0.0%	Shrub	0	0.0%
2.0 NATIVE MEAN C	W-Vine	0	0.0%	W-Vine	0	0.0%
1.5 W/Adventives	H-Vine	0	0.0%	H-Vine	0	0.0%
4.9 NATIVE FQI	P-Forb	4	50.0%	P-Forb	0	0.0%
4.2 W/Adventives	B-Forb	0	0.0%	B-Forb	0	0.0%
-4.5 NATIVE MEAN W	A-Forb	0	0.0%	A-Forb	0	0.0%
-3.7 W/Adventives	P-Grass	0	0.0%	P-Grass	2	25.0%
AVG: Fac. Wetland (+)	A-Grass	1	12.5%	A-Grass	0	0.0%
	P-Sedge	1	12.5%	P-Sedge	0	0.0%
	A-Sedge	0	0.0%	A-Sedge	0	0.0%
	Cryptogam	0	0.0%			

C SCIENTIFIC NAME	W WETNESS	PHYSIOGNOMY	COMMON NAME
4 Alisma subcordatum	-5 OBL	Nt P-Forb	COMMON WATER PLANTAIN
2 Eleocharis erythropoda	-5 OBL	Nt P-Sedge	RED-ROOTED SPIKE RUSH
0 Panicum dichotomiflorum	-2 FACW-	Nt A-Grass	KNEE GRASS
0 PHALARIS ARUNDINACEA	-4 FACW+	Ad P-Grass	REED CANARY GRASS
0 POA PRATENSIS	1 FAC-	Ad P-Grass	KENTUCKY BLUE GRASS
4 Sagittaria latifolia	-5 OBL	Nt P-Forb	COMMON ARROWHEAD
1 Typha angustifolia	-5 OBL	Nt P-Forb	NARROW-LEAVED CATTAIL
1 Typha latifolia	-5 OBL	Nt P-Forb	BROAD-LEAVED CATTAIL

Wetland 5

Wetland 5, characterized at data point 9A, is located northeast of Otter Creek and extends off-site (Exhibit 7). This wetland is dominated by reed canary grass, stinging nettle and tall goldenrod (*Solidago altissima*). Positive wetland hydrology was indicated

by saturated soils. Soils were mapped and field verified as Drummer silty clay loam, a poorly drained hydric soil.

The following lists identified plants with the calculated native mean C-value:

FLORISTIC QUALITY DATA					
6 NATIVE SPECIES	Native	6 66.7%	Adventive	3 33.3%	
9 Total Species	Tree	1 11.1%	Tree	0 0.0%	
2.3 NATIVE MEAN C	Shrub	1 11.1%	Shrub	0 0.0%	
1.6 W/Adventives	W-Vine	0 0.0%	W-Vine	0 0.0%	
5.7 NATIVE FQI	H-Vine	0 0.0%	H-Vine	0 0.0%	
4.7 W/Adventives	P-Forb	4 44.4%	P-Forb	1 11.1%	
-1.3 NATIVE MEAN W	B-Forb	0 0.0%	B-Forb	1 11.1%	
-0.9 W/Adventives	A-Forb	0 0.0%	A-Forb	0 0.0%	
AVG: Faculative (+)	P-Grass	0 0.0%	P-Grass	1 11.1%	
	A-Grass	0 0.0%	A-Grass	0 0.0%	
	P-Sedge	0 0.0%	P-Sedge	0 0.0%	
	A-Sedge	0 0.0%	A-Sedge	0 0.0%	
	Cryptogam	0 0.0%			
C SCIENTIFIC NAME	W WETNESS	PHYSIOGNOMY	COMMON NAME		
4 Apocynum cannabinum	0 FAC	Nt P-Forb	INDIAN HEMP		
0 ARCTIUM MINUS	5 UPL	Ad B-Forb	COMMON BURDOCK		
2 Helianthus grosseserratus	-2 FACW-	Nt P-Forb	SAWTOOTH SUNFLOWER		
0 PHALARIS ARUNDINACEA	-4 FACW+	Ad P-Grass	REED CANARY GRASS		
2 Populus deltoides	-1 FAC+	Nt Tree	EASTERN COTTONWOOD		
1 Salix interior	-5 OBL	Nt Shrub	SANDBAR WILLOW		
1 Solidago altissima	3 FACU	Nt P-Forb	TALL GOLDENROD		
4 Solidago gigantea	-3 FACW	Nt P-Forb	LATE GOLDENROD		
0 URTICA DIOICA	-1 FAC+	Ad P-Forb	STINGING NETTLE		

IDENTIFIED WATERS OF THE U.S.

Waters of the U.S. are defined as the ordinary high water mark in non-tidal waters, provided the jurisdiction is not extended by the presence of wetlands. The term "ordinary high water mark" (OHWM) refers to the line established by fluctuations of water. These fluctuations can be indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, or the presence of litter and debris. The following is a brief description of the identified waters of the U.S.

Waters of the U.S. 1

Waters of the U.S. 1, characterized at data point 1A, represents Otter Creek (Exhibit 7). Otter Creek flows along the northern study area boundary and contains a small unnamed tributary. The unvegetated creek and tributary varies from five to fifteen feet wide and was inundated with various depths of water. The creek bed consisted of a mixture of silt and gravel. Soils were mapped and field verified along the banks of the creek as Houghton muck, a very poorly drained hydric soil.

Waters of the U.S. 2, 3 and 4

Waters of the U.S. 2, 3 and 4, characterized at data points 3A, 8A and 6A, respectively, are open water ponds located on the golf course (Exhibit 7). The ponds were unvegetated and were surrounded by manicured fairway turf grass. The ponds were inundated with more than 24 inches of water and soils were mapped and field verified as Houghton muck, a very poorly drained hydric soil.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Applicant Name: City of Elgin Project Name: Spartan Drive Extension Project Number: 02-914
State: IL County: Kane Section: 21 Township: 41N Range: 8E
Date: 6/18/02 Determined By: Kari Womack/Julie Gangloff

Plot Number: 3A

Do Normal Circumstances exist on the site? Yes Comment:
Is the site significantly disturbed (Atypical Situation)? No Comment:
Is the area a potential Problem Area? No Comment:

VEGETATION

Scientific Name	Common Name	Stratum	Indicator Status
UNVEGETATED			

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0 % Other Indicators:

Remarks:

Hydrophytic Vegetation Present? No Basis:

HYDROLOGY

Wetland Hydrology Primary Indicators:

- ☒ Inundated Depth of standing water: >36"
- ☐ Saturated Soils Depth To Saturated Soil:
- ☐ Saturated In Upper 12 Inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns In Wetlands

Wetland Hydrology Secondary Indicators (2 or more required):

- ☐ Oxidized Root Channels in Upper 12 inches
- ☐ Water-Stained Leaves
- ☒ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks:

Wetland Hydrology Present?: Yes Basis:

SOIL

Series And Phase: Houghton muck

Drainage Class: Very poorly drained

Taxonomy (Subgroup): Typic medisaprists

Map Symbol: 103

Mapped Hydric Inclusion:

☒ Field Observations Confirm Mapped Type

Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Mottle Contrast	Texture, Concretions, Structure, Etc.
0-12		N2/0				sapric material; medium granular structure

Hydric Soil Indicators:

- ☒ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Concretions
- ☐ High Organic Content in Surface Layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils



Christopher B. Burke Engineering, Ltd.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Applicant Name: City of Elgin
State: IL County: Kane
Date: 6/18/02

Project Name: Spartan Drive Extension
Section: 21 Township: 41N
Determined By: Kari Womack/Julie Gangloff

Project Number: 02-914
Range: 8E

- ☐ Aquic Moisture Regime
☐ Reducing Conditions
☒ Gleyed Or Low Chroma Colors

- ☒ Listed on Local Hydric Soils List
☒ Listed on National Hydric Soils List
☐ Other (Explain In Remarks)

Remarks:

Hydric Soils Present? Yes Basis:

Hydrophytic Vegetation Present? No Basis:

Wetland Hydrology Present? Yes Basis:

Hydric Soils Present? Yes Basis:

Wetland Determination: Nonwetland

Comments: THE SAMPLING POINT REPRESENTS A WATERS OF THE U.S.

Plot Number: 3A



DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Applicant Name: City of Elgin Project Name: Spartan Drive Extension Project Number: 02-914
State: IL County: Kane Section: 21 Township: 41N Range: 8E
Date: 6/18/02 Determined By: Karl Womack/Julie Gangloff

Plot Number: 3B

Do Normal Circumstances exist on the site? Yes Comment:
Is the site significantly disturbed (Atypical Situation)? No Comment:
Is the area a potential Problem Area? No Comment:

VEGETATION

Scientific Name	Common Name	Stratum	Indicator Status
POA PRATENSIS	KENTUCKY BLUE GRASS	Herb	FAC-

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0 % Other Indicators:

Remarks:

Hydrophytic Vegetation Present? No Basis:

HYDROLOGY

Wetland Hydrology Primary Indicators:

- ☐ Inundated Depth of standing water:
☐ Saturated Soils Depth To Saturated Soil: >12"
☐ Saturated in Upper 12 Inches
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns In Wetlands

Wetland Hydrology Secondary Indicators (2 or more required):

- ☐ Oxidized Root Channels in Upper 12 Inches
☐ Water-Stained Leaves
☐ Local Soil Survey Data
☐ FAC-Neutral Test
☐ Other (Explain in Remarks)

Remarks:

Wetland Hydrology Present?: No Basis:

SOIL

Series And Phase: Houghton muck

Drainage Class: Very poorly drained

Taxonomy (Subgroup): Typic medisaprists

Map Symbol: 103

Mapped Hydric Inclusion:

☒ Field Observations Confirm Mapped Type

Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Mottle Contrast	Texture, Concretions, Structure, Etc.
0-12		N2/0				sapric material; medium granular structure

Hydric Soil Indicators:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input type="checkbox"/> Aquic Moisture Regime | <input checked="" type="checkbox"/> Listed on Local Hydric Soils List |



DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Applicant Name: City of Elgin
State: IL County: Kane
Date: 6/18/02

Project Name: Spartan Drive Extension
Section: 21 Township: 41N
Determined By: Kari Womack/Julie Gangloff

Project Number: 02-914
Range: 8E

- ☐ Reducing Conditions
☒ Gleyed Or Low Chroma Colors

- ☒ Listed on National Hydric Soils List
☐ Other (Explain In Remarks)

Remarks:

Hydric Soils Present? Yes Basis:

Hydrophytic Vegetation Present? No Basis:

Wetland Hydrology Present? No Basis:

Hydric Soils Present? Yes Basis:

Wetland Determination: Nonwetland

Comments: ALL CRITERIA ARE NOT PRESENT

Plot Number: 38



DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Applicant Name: City of Elgin Project Name: Spartan Drive Extension Project Number: 02-914
State: IL County: Kane Section: 21 Township: 41N Range: 8E
Date: 6/18/02 Determined By: Karl Womack/Julie Gangloff

Plot Number: 4A

Do Normal Circumstances exist on the site? Yes Comment:
Is the site significantly disturbed (Atypical Situation)? No Comment:
Is the area a potential Problem Area? No Comment:

VEGETATION

Scientific Name	Common Name	Stratum	Indicator Status
Eleocharis erythropoda	RED-ROOTED SPIKE RUSH	Herb	OBL
URTICA DIOICA	STINGING NETTLE	Herb	FAC+
PHALARIS ARUNDINACEA	REED CANARY GRASS	Herb	FACW+
Typha angustifolia	NARROW-LEAVED CATTAIL	Herb	OBL
Carex lacustris	COMMON LAKE SEDGE	Herb	OBL

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100 % Other Indicators:

Remarks:

Hydrophytic Vegetation Present? Yes Basis:

HYDROLOGY

Wetland Hydrology Primary Indicators:

- ☒ Inundated Depth of standing water: 5"
☐ Saturated Soils Depth To Saturated Soil:
☐ Saturated In Upper 12 Inches
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns In Wetlands

Remarks:

Wetland Hydrology Present?: Yes Basis:

Wetland Hydrology Secondary Indicators (2 or more required):

- ☐ Oxidized Root Channels in Upper 12 Inches
☐ Water-Stained Leaves
☒ Local Soil Survey Data
☒ FAC-Neutral Test
☐ Other (Explain in Remarks)

SOIL

Series And Phase: Houghton muck

Drainage Class: Very poorly drained

Taxonomy (Subgroup): Typic medisaprists

Map Symbol: 103

Mapped Hydric Inclusion:

☒ Field Observations Confirm Mapped Type

Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Mottle Contrast	Texture, Concretions, Structure, Etc.
0-12		N2/O				saoric material; medium granular structure

Hydric Soil Indicators:

- ☒ Histosol ☐ Concretions



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DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Applicant Name: City of Elgin
State: IL County: Kane
Date: 6/18/02

Project Name: Spartan Drive Extension
Section: 21 Township: 41N
Determined By: Kari Womack/Julie Gangloff

Project Number: 02-914
Range: 8E

- | | |
|---|---|
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input type="checkbox"/> Aquic Moisture Regime | <input checked="" type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input checked="" type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed Or Low Chroma Colors | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks:

Hydric Soils Present? Yes Basis:

Hydrophytic Vegetation Present? Yes Basis:

Wetland Hydrology Present?: Yes Basis:

Hydric Soils Present? Yes Basis:

Wetland Determination: Wetland

Comments: ALL CRITERIA ARE PRESENT

Plot Number: 4A



DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Applicant Name: City of Elgin Project Name: Spartan Drive Extension Project Number: 02-914
State: IL County: Kane Section: 21 Township: 41N Range: 8E
Date: 6/18/02 Determined By: Kari Womack/Julie Gangloff

Plot Number: 4B

Do Normal Circumstances exist on the site? Yes Comment:
Is the site significantly disturbed (Atypical Situation)? No Comment:
Is the area a potential Problem Area? No Comment:

VEGETATION

Scientific Name	Common Name	Stratum	Indicator Status
POA PRATENSIS	KENTUCKY BLUE GRASS	Herb	FAC-

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0 % Other Indicators:

Remarks:

Hydrophytic Vegetation Present? No Basis:

HYDROLOGY

Wetland Hydrology Primary Indicators:

- ☐ Inundated Depth of standing water:
☐ Saturated Soils Depth To Saturated Soil: >12"
☐ Saturated In Upper 12 Inches
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns In Wetlands

Wetland Hydrology Secondary Indicators (2 or more required):

- ☐ Oxidized Root Channels in Upper 12 Inches
☐ Water-Stained Leaves
☐ Local Soil Survey Data
☐ FAC-Neutral Test
☐ Other (Explain in Remarks)

Remarks:

Wetland Hydrology Present?: No Basis:

SOIL

Series And Phase: Houghton muck Map Symbol: 103
Drainage Class: Very poorly drained Mapped Hydric Inclusion:
Taxonomy (Subgroup): Typic medisaprists ☒ Field Observations Confirm Mapped Type

Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Mottle Contrast	Texture, Concretions, Structure, Etc.
0-12		N2/0				sapric material; medium fine granular

Hydric Soil Indicators:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input type="checkbox"/> Aquic Moisture Regime | <input checked="" type="checkbox"/> Listed on Local Hydric Soils List |



DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Applicant Name: City of Elgin
State: IL County: Kane
Date: 6/18/02

Project Name: Spartan Drive Extension
Section: 21 Township: 41N
Determined By: Kari Womack/Julie Gangloff

Project Number: 02-914
Range: 8E

- ☐ Reducing Conditions
☒ Gleyed Or Low Chroma Colors

- ☒ Listed on National Hydric Soils List
☐ Other (Explain In Remarks)

Remarks:

Hydric Soils Present? Yes Basis:

Hydrophytic Vegetation Present? No Basis:

Wetland Hydrology Present?: No Basis:

Hydric Soils Present? Yes Basis:

Wetland Determination: Nonwetland

Comments: ALL CRITERIA ARE NOT PRESENT

Sheet Number: 4B



DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Applicant Name: City of Elgin Project Name: Spartan Drive Extension Project Number: 02-914
State: IL County: Kane Section: 21 Township: 41N Range: 8E
Date: 6/18/02 Determined By: Kari Womack/Julie Gangloff

Plot Number: 5A

Do Normal Circumstances exist on the site? Yes Comment:
Is the site significantly disturbed (Atypical Situation)? No Comment:
Is the area a potential Problem Area? No Comment:

VEGETATION

Scientific Name	Common Name	Stratum	Indicator Status
PHALARIS ARUNDINACEA	REED CANARY GRASS	Herb	FACW+
Sagittaria latifolia	COMMON ARROWHEAD	Herb	OBL
Alisma subcordatum	COMMON WATER PLANTAIN	Herb	OBL
Panicum dichotomiflorum	KNEE GRASS	Herb	FACW-
Typha angustifolia	NARROW-LEAVED CATTAIL	Herb	OBL

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100 % Other Indicators:

Remarks:

Hydrophytic Vegetation Present? Yes Basis:

HYDROLOGY

Wetland Hydrology Primary Indicators:

- ☒ Inundated Depth of standing water: 12"
☐ Saturated Soils Depth To Saturated Soil:
☐ Saturated In Upper 12 Inches
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns In Wetlands

Remarks:

Wetland Hydrology Present?: Yes Basis:

Wetland Hydrology Secondary Indicators (2 or more required):

- ☐ Oxidized Root Channels in Upper 12 Inches
☐ Water-Stained Leaves
☒ Local Soil Survey Data
☒ FAC-Neutral Test
☐ Other (Explain in Remarks)

SOIL

Series And Phase: Houghton muck

Drainage Class: Very poorly drained

Taxonomy (Subgroup): Typic medisaprists

Map Symbol: 103

Mapped Hydric Inclusion:

☒ Field Observations Confirm Mapped Type

Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Mottle Contrast	Texture, Concretions, Structure, Etc.
0-12		N2/O				sapric material; medium fine granular

Hydric Soil Indicators:

- ☒ Histosol ☐ Concretions



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DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Applicant Name: City of Elgin
State: IL County: Kane
Date: 6/18/02

Project Name: Spartan Drive Extension
Section: 21 Township: 41N
Determined By: Kari Womack/Julie Gangloff

Project Number: 02-914
Range: 8E

- | | |
|---|--|
| <input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input checked="" type="checkbox"/> Gleyed Or Low Chroma Colors | <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain In Remarks) |
|---|--|

Remarks:

Hydric Soils Present? Yes Basis:

Hydrophytic Vegetation Present? Yes Basis:

Wetland Hydrology Present?: Yes Basis:

Hydric Soils Present? Yes Basis:

Wetland Determination: Wetland

Comments: THE AREA REPRESENTS A WETLAND ADJACENT TO A TRIBUTARY OF OTTER CREEK.
Plot Number: 5A



DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Applicant Name: City of Elgin
State: IL County: Kane
Date: 6/18/02

Project Name: Spartan Drive Extension
Section: 21 Township: 41N
Determined By: Kari Womack/Julie Gangloff

Project Number: 02-914
Range: 8E

Plot Number: 5B

Do Normal Circumstances exist on the site? Yes Comment:
Is the site significantly disturbed (Atypical Situation)? No Comment:
Is the area a potential Problem Area? No Comment:

VEGETATION

Scientific Name	Common Name	Stratum	Indicator Status
POA PRATENSIS	KENTUCKY BLUE GRASS	Herb	FAC-

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0 % Other Indicators:

Remarks:

Hydrophytic Vegetation Present? No Basis:

HYDROLOGY

Wetland Hydrology Primary Indicators:

- ☐ Inundated Depth of standing water:
- ☐ Saturated Soils Depth To Saturated Soil: >15"
- ☐ Saturated In Upper 12 Inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns In Wetlands

Remarks:

Wetland Hydrology Present?: No Basis:

Wetland Hydrology Secondary Indicators (2 or more required):

- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

SOIL

Series And Phase: Houghton muck

Map Symbol: 103

Drainage Class: Very poorly drained

Mapped Hydric Inclusion:

Taxonomy (Subgroup): Typic medisaprists

☒ Field Observations Confirm Mapped Type

Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Mottle Contrast	Texture, Concretions, Structure, Etc.
0-15		N2/O				sapric material; medium fine granular

Hydric Soil Indicators:

- ☒ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Concretions
- ☐ High Organic Content in Surface Layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☒ Listed on Local Hydric Soils List



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DATA FORM
ROUTINE WETLAND DETERMINATION
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Applicant Name: City of Elgin
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Project Number: 02-914
Range: 8E

- ☐ Reducing Conditions
☒ Gleyed Or Low Chroma Colors

- ☒ Listed on National Hydric Soils List
☐ Other (Explain In Remarks)

Remarks:

Hydric Soils Present? Yes Basis:

Hydrophytic Vegetation Present? No Basis:

Wetland Hydrology Present?: No Basis:

Hydric Soils Present? Yes Basis:

Wetland Determination: Nonwetland

Comments: ALL CRITERIA ARE NOT PRESENT

Sheet Number: 5B

